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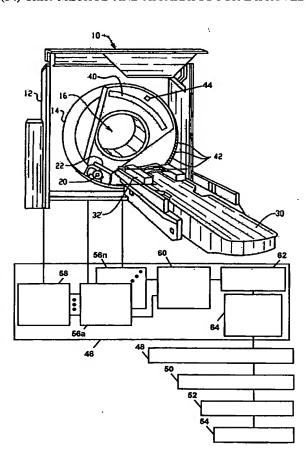
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### (54) Title: METHOD AND APPARATUS FOR IMPROVED RADIATION DETECTION



(57) Abstract: In a method for measuring detected radiation, an analog data signal is converted to a digital data signal having aperiodic data pulses varying with intensity of the analog data signal. A time signal indicative of data intervals is produced. The data pulses are counted. A data count is stored in a start location and a corresponding time value is stored in a start location each time a data pulse occurs until a measured data interval starts. After a next data interval is detected, the data count is stored in an end location and a corresponding time value is stored in an end location when the next data pulse occurs. An average intensity of the detected radiation for the measured data interval is determined from the stored data counts and time values. A CT scanner (10) for measuring detected radiation includes a channel circuit (56), a storage circuit (60), a control circuit (58), and a processor (62).

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